

NWS CHANGE FORM PART A			1. DATE SUBMITTED	
This form is in three parts. Submitters must complete unshaded blocks in Part A and as much of Part B as possible. WSH will complete Part C (implementation details). If there is no specific required change date, enter 60 days from date submitted. Address questions to NWS Change Management at (301) 713-1373. Submit change requests to the NWSRC mailbox (External: NWSRC@noaa.gov).				
2. ORIGINATOR OFFICE NWS/OM	3. SUBMITTING AUTHORITY Name: Greg Mandt Routing Code: W/OM	4. COGNIZANT TECHNICAL INDIVIDUAL Name: Robin Radlein/Rich Lane Routing Code: W/OM22 Phone: (301) 713-1867 x 121/ x137	5. ORIGINATOR TRACKING NUMBER NWS-500	
6. SYSTEMS AFFECTED BY CHANGE <input type="checkbox"/> Data PRODUCTS (Complete Data Products Supplement) <input type="checkbox"/> ASOS <input checked="" type="checkbox"/> AWIPS <input type="checkbox"/> CRS <input checked="" type="checkbox"/> NEXRAD <input type="checkbox"/> OTHER (specify) _____			7. WSH TRACKING NUMBER NWS 500	
8. TITLE OF CHANGE AWIPS Connectivity to DOD Radars				
9. TYPE OF CHANGE <input checked="" type="checkbox"/> HARDWARE <input type="checkbox"/> SOFTWARE <input type="checkbox"/> DOCUMENTATION ONLY		10. SITES AFFECTED (Attach Part B, Page 2, if needed) See Table 1 in element 12		
11. STATEMENT OF REQUIREMENT, PROBLEM, OR DEFICIENCY OF EXISTING SYSTEM (Include problem report reference numbers.) Routine availability of data from multiple radars is required to provide necessary radar information for areas in which the primary radar data may be suspect or unavailable, as well as supporting service backup in areas whose primary coverage is provided by the other radars. Central collection of these data will allow redistribution of these data and a more cost effective method of providing necessary data to National Centers, River Forecast Centers and neighboring WFOs.				

12. KNOWN OR PROPOSED SOLUTION (Include source and description of new features or data products.)

To support the central collection of radar data from all DOD radars using AWIPS and the AWIPS Wide Area Network (WAN) install A/B switches on the Supplemental PUPs in twelve offices to allow the 14.4 kbps dedicated associated connection from the DOD RPG to be switched back to the available PUP if AWIPS is down. Acquire DOD To NWS AWIPS dedicated associated connections at six offices for which dedicated associated connections are not currently available. Upgrade the 22 DOD to NWS AWIPS dedicated connections listed in Table 1 to a line speed of 33.6 kbps to accommodate a wider suite of products for central collection of radar data from the DOD radars. Products/WAN impacts/modem types all coordinated with APO and DRG prior to RC.

Leased 4-wire dedicated phone circuits will need to be acquired for six offices; the DOD RPG has a modem in place for this purpose, as does the AWIPS at each site, although these may need to be replaced when feasible with a new modem to support the higher 33.6 kbps line speed. An A/B switch will be made available on the Supplemental PUP dedicated connection in place at the remaining 12 offices (this number will be confirmed before the hardware order is placed as two Eastern Region sites would like to evaluate an alternative option). The Supplemental PUP modem may also need to be upgraded at these 12 sites to match the upgraded RPG modem should the line be switched back to the PUP during severe weather or during an AWIPS failure. At three sites (Birmingham, Jackson, and Paducah), the site will need to make a permanent transfer of its 56 kbps RPGOP connection to AWIPS, freeing the 14.4 kbps dedicated modem currently used by the RPGOP A/B switch configuration to be available for this DOD connection. The 14.4 kbps connection would then be permanently in place on the associated Supplemental PUP.

Table 1. Required AWIPS Connectivity to DOD Radars

Install A/B switches on dedicated connections to Associated PUPs and upgrade modems to 33.6 kbps at RPG, PUP and AWIPS.

WFO	DOD	RPG
Albuquerque	FDX	Cannon AFB
Atlanta	JGX	Robins AFB
Austin/San Antonio	DFX	Laughlin AFB
Birmingham	MXX	Maxwell AFB
Dallas/Ft. Worth	GRK	Central Texas
Lake Charles	POE	Ft. Polk
San Angelo	DYX	Dyess AFB
Las Vegas	EYX	Edwards AFB
Los Angeles	VBX	Vandenberg AFB
Sacramento	BBX	Beale AFB
Burlington	TYX	Ft. Drum
Wakefield	DOX	Dover AFB

Install dedicated connections to AWIPS from DOD RPGs and upgrade modems to 33.6 kbps at RPG and AWIPS.

WFO	DOD	RPG
Jackson MS	GWX	Columbus AFB
Paducah	HPX	Ft. Campbell
El Paso	HDX	White Sands
Jacksonville	VAX	Moody AFB
Mobile	EVX	Eglin AFB
Tallahassee	EOX	Ft. Rucker

Upgrade modems to 33.6 kbps at RPG and AWIPS.

WFO	DOD	RPG
Bismarck	MBX	Minot AFB
Oklahoma City/Norman	FDR	Altus AFB
	VNX	Vance AFB
Guam	GUA	Anderson AFB

13. ALTERNATE SOLUTIONS

14. REQUIRED
CHANGE DATE
January 12, 2000

15. RATIONALE FOR REQUIRED CHANGE DATE (Include proposed priority, if known.)

This date will allow central collection of these data to be in place prior to commissioning the first AWIPS sites.

CCB/PMC/CMB DECISION

16. DECISION AUTHORITY LEVEL	<input type="checkbox"/> CCB LEVEL ONLY	<input type="checkbox"/> PMC or NWS CMB DECISION REQUIRED
17. CCB LEVEL DECISION	<input type="checkbox"/> APPROVED	SIGNATURE
	<input type="checkbox"/> RECOMMEND APPROVAL	DATE SIGNED
	<input type="checkbox"/> DISAPPROVED	
FOR USE ONLY WHEN PMC or NWS CMB DECISION REQUIRED		
18. PMC OR NWS CMB DECISION	<input type="checkbox"/> APPROVED	SIGNATURE
	<input type="checkbox"/> DISAPPROVED	DATE SIGNED

NWS CHANGE FORM PART B		1. ORIGINATOR TRACKING NUMBER NWS500	
All RC/ECP submissions must also address the following information. Indicate if any areas are unknown or do not apply. State why information is unknown and when it will be available. Attach extra pages if necessary, referencing each applicable subject.		2. WSH TRACKING NUMBER NWS 500	
FUNDING INFORMATION			
Estimate costs and indicate known sources of funding. (Include travel time, installation time, administrative time, and software development time when applicable.)		3. SOURCE OF FUNDING	4. TOTAL COST \$56K
5. DEVELOPMENT COSTS (Estimate development costs)			AMOUNT
6. OPERATIONAL TEST AND EVALUATION COSTS (Estimate test and evaluation costs)			AMOUNT
7. PRODUCTION COSTS (Include acquisition, kit proofing, spares, delivery, and documentation costs) \$10K to install A/B switches and upgrade the PUP modems to 33.6K		half from NEXRAD funds, half from AWIPS funds	AMOUNT \$10K
8. COMMUNICATIONS SERVICE/CIRCUITS COSTS (Include installation and recurring costs) New communications lines at 6 sites		Use funds from NIDS vendor fees	AMOUNT \$46K
9. IMPLEMENTATION SUPPORT COSTS (Include travel, installation, and administrative costs)			AMOUNT
9A. LIFE CYCLE SUPPORT COSTS (Less communications service/circuits)			AMOUNT
SUPPORTING INFORMATION AND SCHEDULES Provide detailed information needed to implement the requested change.			
10. DEVELOPMENT STATUS/SCHEDULE (Major milestones such as Start, Beta Test, and OT&E)		11. PRODUCTION STATUS/SCHEDULE (Major milestones such as Solicitation, Contract Start Date, Delivery Date, Kit Proofing, etc.)	
12. IMPLEMENTATION/RETROFIT SCHEDULE		13. FACILITY INFORMATION (Attach facility drawings/plans.)	
14. COMMUNICATIONS INSTALLED (Type required, who will order, and associated hardware required; attach Part B, Page 2, if needed.) Six new 4-wire dedicated circuits order October 13, 1999 per verbal instructions from Ward Seguin / Mary Glackin		15. COMMUNICATIONS SERVICE/CIRCUITS TO BE REMOVED	
16. REQUIRED CLEARANCES, WAIVERS, AND LICENSES (Include person or organization responsible for obtaining each)		17. COORDINATION OF CHANGE WITH OTHER CHANGES DOD modems in place per ECP F0009R3	
18. PHYSICAL ITEMS AND DOCUMENTS AFFECTED (Include part, serial, and document numbers. Attach Part B, Page 2, if needed.)		19. STAFF RESOURCE IMPACTS (Skills and workload impact on maintainers, operators, and managers.)	
20. LOGISTICS IMPACTS (Include facilities, maintenance, training, and support equipment impacts.)		21. OPERATIONAL IMPACTS (Include continuity and back up needs and plans.)	
22. ADDITIONAL MAJOR CHANGE ACTIVITIES (Include who will accomplish each of them and staff hours required.) Evaluate Upgrade to 33.6 kbps S - completed by -Scott Enders, OSF ENG Cost estimates provided by John Millhouse (405) 366-6520 x4247 jmillhouse@osf.noaa.gov			

NWS CHANGE FORM

2. WSH TRACKING NUMBER

3. ITEM NAME,
CIRCUIT TYPE,
SOFTWARE VERSION,
OR SITE LOCATION

4.
REMOVE
REPLACE
MODIFY

A. PART NUMBER OR CONFIGURATION

6. SUPERSEDING PART
NUMBER OR NEW
CONFIGURATION

8. SUPERSEDED
DOCUMENT

A. IDENTIFIER

9. SUPERSEDING
DOCUMENT

A. IDENTIFIER

[illegible]

<div>NWS CHANGE FORM</div> <div>PART C</div>		1. ORIGINATOR TRACKING NUMBER NWS500	
WSH is responsible for Part C, but submitters may complete sections that would help clarify the change requirement or the necessary implementation actions.		2. WSH TRACKING NUMBER	
3. CCB COST EVALUATION			
NWS COST \$ \$56K		FAA COST \$	DOD COST \$
		OTHER AGENCY COST \$ (SPECIFY)_____	
		TOTAL COST \$ 56K	
4. IMPLEMENTATION DOCUMENTS REQUIRED			
<input checked="" type="checkbox"/> Engineering Modification Note			
<input type="checkbox"/> Software Release Notes			
<input type="checkbox"/> Other Document (Specify)_____			
ADDITIONAL IMPLEMENTATION INSTRUCTIONS (e.g., Implementation schedule, parts shipping instructions, equipment disposal procedures, additional documentation required, and status reporting instructions.) Include documentation, data input, notification vehicle, or specific action step required to verify completion of the implementation activity.			
5. IMPLEMENTATION ACTIVITY REQUIRED		6. REQUIRED COMPLETION DATE	7. RESPONSIBLE PERSON AND OFFICE
8. DOCUMENT OR ACTION REQUIRED TO VERIFY COMPLETION			
Install new Comms lines		January 12, 2000	Chris White W/OSO
Install A/B switches between DOD APUPs and AWIPS (field mod kits)		January 12, 2000	Christine Ostrander, OSF
Replace 14.4 kbps modems with 33.6 kbps modems (field mod kits)		March 30, 2000	Christine Ostrander, OSF